

Past Tribals Dyeing Knowledge Is Important For The Current Generation

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ABSTRACT

Synthetic chemical dyes are suspected to be harmful causing allergic, carcinogenic and other detriments to human beings. Dyeing yarn or garments is a job exclusively of women and involves various stages that sometimes may take a year to get the desired result. Herbal dyes are also used for coloring crafts and tattooing. For some dyes a mordant is used. The methods of dye extraction and processing yarn and garments are discussed below as were utilized by tribals sorted by color produced.

AN INTRODUCTION TO DYES

Dyes are colorants having several applications in textiles, crafts, cosmetics, and tattoos. Humans have developed inclinations toward certain colors considered to be lively and attractive. In ancient times plant dyes were used for coloring animal hides and tattooing skin. These were important during religious festivals and wars as well as for painting cave dwelling walls. (1,2)

HISTORY OF DYEING

Color is believed to give magical powers, protect them from evil spirits and to help achieve victory in war (Siva 2003). The earliest written record (ca 2600 BC) of dyes is in China. During the Indus Valley civilization (ca 2500 BC) findings of colored garments and traces of madder (*Rubia cordifolia* L.) in the ruins at Mohenjodaro and Harappa are evidence of dye use at that time. In Egypt, mummies have been found wrapped in dyed clothes. The Christian holy book (Bible) has mention of use of many natural dyes including saffron (3). Henna was known to be used even before 2500 BC. By the 4th century AD, dyes sources such as woad, madder, well, Brazilwood, indigo and a dark-purple were known. Brazil was named after the red dye made from Brazilwood (4,5).

NATURAL DYES ARE ECOFRIENDLY

Synthetic chemical dyes are suspected to be harmful causing allergic, carcinogenic and other detriments to human beings. By contrast, natural dyes are thought to be environmentally friendly and beneficial. For example, indigo gives a cooling sensation, while turmeric (*Curcuma longa* L.), the brightest of naturally occurring yellow dyes, is a powerful antiseptic, thought to revitalize the skin (6,7).

DYEING OF YARN AND GARMENTS

Dyeing yarn or garments is a job exclusively of women and involves various stages that

sometimes may take a year to get the desired result. Herbal dyes are also used for coloring crafts and tattooing. For some dyes a mordant is used. The prevalent methods of dye extraction and processing yarn and garments are discussed below sorted by color produced.

INDIGO DYE

Blue/Indigo dyes *Strobilanthes cusia* (Nees) Kuntze leaves are extracted and used for an indigo dye. Leaves are pounded in a long (wooden mortar) with lengpum (wooden mallet), the paste is transferred to a container (dish or basket) and allowed to ferment for a week. The paste is then mixed properly, dried in shade, and then stored for future use (8).

Dried paste is powdered, mixed with an adequate quantity of water and pholo (alkaline solution prepared from charcoal of bamboo or wood), and the mixture is kept undisturbed for three nights. The intensity of the color is tested by putting a finger into the solution and if the dye firmly adheres to the skin, then the solution is said to be ready for dyeing. A solution may need to remain for some more days if it does not pass this test. Yarn or garments are dipped into the solution gradually from one end. After five days, the yarn or garments are taken out and excess dye is rinsed with water. Yarn or garments are dried in the sun and again soaked in the dye solution.

YELLOW DYES

Morinda angustifolia Roxb. root is a major source of yellow dye. Roots are cut into pieces and dried in sunlight. The material is then pounded and stored for future use. During dyeing, a layer of pounded root of thengmerok (*Wendlandia puberula* DC.) is placed at the bottom of the container followed by the yarn to be dyed, another layer of thengmerok and finally, an adequate quantity of tarlong powder. An adequate quantity of water is added and the yarn is boiled for a few hours, and then sun dried for some time. The yarn is boiled three times each time with fresh dye powder after which the desired color intensity is said to be produced. The thengmerok powder is added to prevent yarn from contacting the container bottom as it is said to cause yarn brittleness. Yarn dyed with tarlong is used for weaving various types of garments. Curcuma longa rhizomes constitute an important source of yellow dye. Rhizomes are sliced into thin pieces and transferred into a container with an adequate quantity of water. Yarn is immersed into it and boiled for a few hours until a yellow color of the required shade is obtained. Yarn is allowed to cool and then dried under shade (9,10).

BLACK DYES

Aporosa octandra (Buch.-Ham. ex D. Don) Vickery is used as a mordant when dyeing yarn with minerals. Black colored minerals are pounded into fine powder and mixed with water. Leaves of tamsir (*A. octandra*) are placed at the bottom of the container and above this yarn is placed. Another layer of tamsir leaves are placed above the yarn and the mineral solution is added until it submerges the upper tamsir layer.

The yarn are then boiled until threefourths of the solution has evaporated. It is then allowed to cool down over night. Usually boiling is repeated thrice and each time fresh mineral solution is added; this is reported to produce black color of the desired shade. Yarn is then sun dried before

it can be used for weaving garments. The bottom layer of tamsir leaves prevent yarn from coming in direct contact with the container which is reported to make the yarn brittle. The upper layer of leaves controls or reduces the rate of evaporation so that the dye solution gets maximum time to react with yarn.

CONCLUSION

Unfortunately, the wealth of traditional knowledge pertaining to herbal dyes and dyeing is fast moving towards oblivion due to the availability of cheap chemically dyed yarn in the market and lack of interest among the young generation. Further studies are required to understand the history of dye use and oral traditions. Studies could also revitalize natural dye use by creating awareness and commercialization of certain natural dyes through systematic approaches and planning. This could enhance the rural economy and also preserve traditional knowledge and culture.

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